

TREKHOV, P. G.

USSR/Medicine - Physiology

FD 260

Card 1/1

Author : Trekhov, P. G. (Leningrad)

Title : Biographic material about A. A. Ukhtomskiy

Periodical : Fiziol.zhur. 2, 246-256, Mar/Apr 1954

Abstract : Aleksey Alekseyevich Ukhtomskiy (1875-1942), eminent Soviet physiologist, first attained prominence when he defended his master's thesis (in 1910) on the subject of "Dependence of Cortical Effects on the Secondary Central Reactions." His thesis received praise both from the then famous Russian histologist A. S. Dogel' and from the outstanding Russian physiologist N. Ye. Vvedenskiy. Ukhtomskiy was member-president of the Leningrad society of naturalists, active member of the Academy of Sciences of the USSR, and director of the department of Biology of the Leningrad State University. He organized the physiological scientific-research institute, Leningrad State University, where he taught anatomy and physiology. In 1919 Ukhtomskiy served briefly as a member of the Leningrad Soviet, representing workers of the Leningrad State University.

Institution :

Submitted : September 30, 1952

Dissertation: "A Study of the Processes of Formation and Breakdown of an Optical Contact."  
Cand Phys-Math Sci, Moscow Engineering-Physics Inst, 28 Jun 54. (Vechernyaya Moskva, Moscow,  
17 Jun 54)

SO: SUM 318, 23 Dec 1954

"APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001756520009-6

APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001756520009-6"

Trekhov, E.S.

PA - 2659

AUTHOR:

OBREIMOV, I.V., TREKHOV, E.S.

TITLE:

Optical Contact of Polished Glass Surfaces. (Opticheskiy kontakt polirovannykh steklyannykh poverkhnostey, Russian)  
Zhurnal Eksperim. i Teoret. Fiziki, 1957, Vol 32, Nr 2,  
pp 185 - 193 (U.S.S.R.)

PERIODICAL:

Received: 5 / 1957

Reviewed: 6 / 1957

ABSTRACT:

As "epitcal contact" the following phenomenon is defined: Two carefully ground and polished plane glass surfaces adhere so firmly together when brought into contact with each other that they can be separated only with difficulty. If both glass surfaces have the same refractive index, such an optical contact reflects almost no light.

The investigated objects are then described. Special samples were made of a glass having a composition similar to that of the K-8 type. Each specimen consisted of a thick and a thin sample. The process of investigation and measurement: In separating the two surfaces an air wedge is formed. When investigating the place of separation in monochromatic light interference stripes of same thickness are clearly visible. By extrapolation the position of the zero-th stripe, i.e. the place of contact of the two plates, can be determined. The curvature of the top plate permits computation of the effort necessary for tearing apart the contact.

Card 1/2

Optical Contact of Plished Glass Surfaces.

PA - 2659

Measuring results: are shown in tables. In spite of the very great differences between individual values it is possible to speak of average values of the tearing effort of an optical contact.

The reproduceability of a contact: The possibility for an independent secondary reproduction of an optical contact is determined by its freshness. The fresher the contact the easier it is to reduce it. But this is not a rigorous law.

Elastic tensions within the domain of the contact are to a certain degree analogous to the tensions near a fissure in the surface of a glass. In the case of an optical contact local tensions appear in the immediate vicinity of the contact surface. In conclusion the "burning together", i.e. the joining of the two glasses to one inseparable unit by careful heating is discussed.  
(5 illustrations, 6 tables, and 3 Russian citations).

ASSOCIATION: Moscow State University.

PRESENTED BY:

SUBMITTED:

AVAILABLE: Library of Congress.

Card 2/2

AUTHOR TREKHOV E.S. PA - 3140  
TITLE The Investigation of the Optical Contact of Mica With Glass.  
PERIODICAL (Issledovaniye opticheskogo kontakta slyudy so steklom -Russian)  
Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 3, pp 550-552 (U.S.S.R.)  
Received 6/1957 Reviewed 7/1957

ABSTRACT The author found that if mica foils are sufficiently thin (about 5 microns), they can be brought into optical contact with glass. This contact, however, must be established immediately after the splitting off of the mica foils. The state of the polished glass surface not only exercises an important influence upon the character of the contact, but also upon the possibility of the occurrence of the contact. Fitting of mica foils onto the contact is most successfully effected if the surface of the glasses is cleaned by means of a high-frequency glow discharge. Contact of glimmer with glass never gives large surfaces with a continuous contact, but the contacting surfaces interlock firmly and irregularly. Contact is brought about in a manner as if very rough surfaces were creeping over one another. On this occasion the mica surface becomes considerably scratched. All cases of such a contact established between mica and glass investigated by the author can be assigned to two different types. Among the first are optical contacts with large contact surfaces. The breaking limit of the contact in the micro-domain is, as a rule rectilinear. The molecular interlinking forces between the surfaces which are in contact are probably very constant in this case. The second type of contact is characteri-

Card 1/2

The Investigation of the Optical Contact of Mica With Glass. PA - 3140  
zed by an irregular shape of the breaking limit, by a not constant cur-  
vature of the stripped off foil, and by a not constant width of the in-  
terference-B-strippe. This type of contact, which is here described as "in-  
homogeneous", is more frequently found than the "homogeneous" type. By chan-  
ging the process of purifying the glass surface it is possible to change  
the type of their contact with mica. On the contact surface of mica with  
glass so-called "membrane-like" spots occur, which are glass bubbles. The  
homogeneous form of contact is always connected with a high degree of sur-  
face parity. In the case of a homogeneous contact the work to be performed  
for the production of a surface unit of the spot is constant.  
(with 1 illustration and 1 table)

ASSOCIATION Moscow Institute for Physical Engineering  
PRESENTED BY REBINDER P.A., Member of the Academy  
SUBMITTED 10.12.1956  
AVAILABLE Library of Congress  
Card 2/2

"APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001756520009-6

~~Л.И.Лихачев~~  
~~ТРЕХОВ, М.И., канд.техн.наук~~

~~Efficient utilization of electric power in the I.A.Likhachev  
automobile plant in Moscow. Prom.energ.12 no.11:29-32 N '57.  
(Moscow--Automobile industry) (Electric power)~~

APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001756520009-6"

L 7706-66 EWT(1)/ETC/EFF(n)-2/EWG(m)/EPA(w)-2 IJP(c) GG/AT  
ACC NR: AP5025900 SOURCE CODE: UR/0057/65/035/010/1853/1859

AUTHOR: Basharov, R.; Gavrilovskaya, Ye. N.; Malkin, O.A.; Trekhov, Ye. S. 77  
ORG: Moscow Engineering Physics Institute (Moskovskiy inzhenerno-fizicheskiy in- 77  
stitut)

TITLE: Investigation of the cathode spots of a pulsed discharge between parallel electrodes

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 10, 1965, 1853-1859

TOPIC TAGS: gas discharge, discharge plasma, air, plasma gun, electrode, cathode spot

ABSTRACT: The 3 kV discharge of a 36  $\mu$ fd capacitor between plane parallel copper electrodes in  $9 \times 10^{-3}$  mm Hg of air was investigated in order to obtain information concerning the processes taking place near the electrodes in a plasma gun. Ordinary and streak photographs of the electrodes were recorded during the discharge and the damaged electrode was subsequently examined under optical and electron microscopes. The streak photographs showed that while the discharge moved along the cathode at velocities up to  $5 \times 10^6$  cm/sec there were bright regions that did not move. The presence of these stationary glowing regions was confirmed by the ordinary photographs, and small damaged regions were found by microscopic examination. These stationary glowing regions did not appear on the anode, and they are identified as cathode spots.

Card 1/2 UDC: 533.9  
0701 1680

L 1100-64

ACC NR: AP5025900

The cathode spots showed a complex microstructure (including microfractures observable only with the electron microscope), which is described in some detail. It is concluded that the cathode spots of a pulsed discharge moving rapidly along a plane electrode in a rarefied gas arise and exist independently of each other and remain stationary during their whole life. It is also concluded that one must take account of the fine structure of the cathode spot when attempting to estimate the current density; estimates based on the gross structure alone will necessarily be too small. Orig. art. has: 6 figures and 3 tables.

SUB CODE: EM, ME/ SUBM DATE: 18Dec64/ ORIG REF: 006/ OTH REF: 004

L 18537-66 ENT(1)/ETC(f)/EPF(n)-2/EWG(m) IJP(c) AT  
ACC NR: AP6002304

SOURCE CODE: UR/0441/65/008/006/1196/1202

AUTHOR: Soshnikov, V. N.; Trekhov, Ye. S. 38

ORG: Moscow Engineering and Physics Institute (Moskovskiy inzhenerno-fizicheskiy institut) B

TITLE: Specific power of field harmonics in a radio-frequency discharge with an allowance for their nonlinear interaction

SOURCE: IVUZ. Radiofizika, v. 8, no. 6, 1965, 1196-1202

TOPIC TAGS: radio frequency discharge, gas discharge plasma

ABSTRACT: The problem of the effect of various electric fields upon the conductivity of a nonequilibrium homogeneous slightly-ionized plasma is considered with this assumption:  $\omega/2\pi \ll \nu_o \ll \nu_{ee} \ll \nu_c^{21, 44, 5}$ , where  $\omega$  is the harmonic frequency,  $\nu_o$  is the frequency of nonelastic electron-molecule collisions,  $\nu_{ee}$  is the frequency of electron-electron collisions,  $\nu_c$  is the frequency of elastic collisions. A formula is developed for conductivity for a weak harmonic  $E = E_{02} \cos(3\omega t)$  in plasma; this harmonic is produced by a strong electric field  $E = E_{01} \cos(\omega t)$ . Numerical evaluations for  $N_2$ -gas serve to illustrate the applicability of the formula and the underlying idealizations. Orig. art. has: 24 formulas and 1 table.

SUB CODE: 20 / SUBM DATE: 04Jan65 / ORIG REF: 002 / OTH REF: 010

17/

Card 111 Mgs

UDC: 537.5 : 533.9

L 35853-66 EWT(1)

ACC NR: AP6014061

SOURCE CODE: UR/0294/66/004/002/0166/0172

AUTHOR: Soshnikov, V. N. (Moscow); Trekhov, Ye. S. (Moscow) 76  
1

ORG: none

TITLE: The theory of a high frequency vortical discharge at high pressure. I.

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 2, 1966, 166-172

TOPIC TAGS: high frequency discharge, thermodynamic equilibrium, HIGH PRESSURE, VORTEX

ABSTRACT: On the basis of a qualitative analysis of the conditions which characterize an infinitely long cylindrical high frequency vortical discharge at high pressure ( $p \geq 0.1$  atm), the article proposes a simple qualitative criterion for the presence of thermodynamic equilibrium. In this case, the theory of a vortical discharge leads to the simultaneous solution of Maxwell's equations (with the electrical conductivity as a function of the radius) and the heat conductivity equation. Numerical calculations are made in the article for air at a temperature at the center of 6000 and 10,000°K, a pressure of 1 atm, and a field frequency of 50 megacycles. The calculations establish the non-existence, under these conditions, of the effect of the magnetohydrodynamic forces of the

Card 1/2

UDC: 537.52, 537.96, 533.9.07

L 35853-66

ACC NR: AP6014061

high frequency magnetic field due to the discharge. Results of the calculations are shown in tabular and graphic form. Orig. art. has: 11 formulas, 2 figures and 1 table.

SUB CODE: 20/ SUBM DATE: 13Feb65/ ORIG REF: 009/ OTH REF: 012

Card 2/2 ill.

TREKINA, T.A.

Oxylidine treatment of patients with cerebrovascular diseases  
and mental disorders. Zhur. nevr. i psich. 65 no.1:105-109 '65.  
(MIRA 18:2)

1. Klinika ekspertizy i vosstanovleniya trudosopobnosti (zavedu-  
yushchiy - prof. D.Ye. Melekhov) Nauchno-issledovatel'skogo  
instituta psichiatrii (direktor - prof. D.D. Fedotov) Ministerstva  
zdravookhraneniya RSFSR, Moskva.

TREKINA, T. A.

Trekina, T. A. - "On the peculiarities of certain forms of schizophrenia in war time,"  
Trudy Tsentr. in-ta psichiatrii, Vol. IV, 1949, p. 398-404

SO: U-4934, 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949).

"APPROVED FOR RELEASE: 03/20/2001

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APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001756520009-6"

"APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001756520009-6

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HEREIN IS UNCLASSIFIED  
DATE 10-12-2010 BY SP5000  
ALL INFORMATION CONTAINED  
HEREIN IS UNCLASSIFIED  
DATE 10-12-2010 BY SP5000

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APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001756520009-6"

KONSTANTINOV, B.A.; TUSHMALOVA, L.A.; TREKOVA, N.A.

Cardiotomy of the excluded right heart in cavapulmonary  
anastomosis; an experimental study. Trudy 1-go MMI 16:19-24'62.  
(MIRA 16:6)

1. Iz kafedry operativnoy khirurgii i topograficheskoy ana-  
tomii (zav. - chlen-korrespondent AMN SSSR prof. V.V.Kovanov)  
Pervogo Moskovskogo ordena Lenina meditsinskogo instituta.  
(HEART--SURGERY)

GIGAURI, V.S.; LIVSHITS, Ye.V.; TREKOVA, N.A.

Effect of muscle relaxants on the cardiovascular system. Trudy  
(MIRA 18:3)  
1-go MMI 33:41-47 '64.

ZOL'NIKOV, S.M.; ALEKSANDROV, V.N.; STEPAN'KOV, Yu.L.; TREKOVA, N.A.;  
PERSHIN, L.F.

Prophylaxis and therapy in hypoxic states developing during  
operations on the heart under anesthesia. Trudy 1-go MMI 33:  
403-408 '64. (MIRA 18:3)

## PHASE I BOOK EXPLORATION

SOF/4803

International symposium on macromolecular chemistry. Moscow, 1960.  
 Mezhdunarodnyi simpozium po makromolekulyarnoy khimii, SSSR, Moskva, 14-18 iyunya 1960 g. doklad 1 stranitsy. Sessiya II. (International Symposium on Macromolecular Chemistry, Held in Moscow, June 14-18; Papers and Summaries) Section II. [Moscow, Izd-vo AN SSSR, 1960] 559 p. 5,500 copies printed.

Sponsoring Agency: The International Union of Pure and Applied Chemistry, Commission on Macromolecular Chemistry

Tech. Ed.: T.A. Prusakova.

PURPOSE: This book is intended for chemists interested in polymerisation reactions and the synthesis of high-molecular compounds.

COVERAGE: This is Section II of a multi-volume work containing papers on macromolecular chemistry. The papers in this volume treat mainly the kinetics of various polymerisation reactions initiated by different catalysts or induced by radiation. Among the research techniques discussed are electron paramagnetic resonance spectroscopy and light-scattering intercalation. There are summaries in English, French and Russian. No personalities are mentioned. References follow each article.

Mihail, R., and J. Barcovich (Hungary). On the Mechanism of the Formation Reaction of Stereoregular Polymers 302

Szabo, A., and G. Obzsee (Hungary). On the Kinetics of a Reaction on Zeigler Catalysts 310

Vichterlova, O., M. Marek, and I. Trnkova (Czechoslovakia). Kinetics of the Polymerization of Isobutylene on a Heterogeneous Catalyst 312

Borik, V. (Czechoslovakia). Heterogeneous Catalysts for the Polymerization of Alkenes 310

Vassilev, K., L. Andreev, N. Yilin, and O. Hestek (Czechoslovakia). The Effect of Donor Type Impurities on the Polymerization of Propylene, Catalyzed by the System Tin(II) Chloride-Copper(II)-Alumina 317

Kolopolyuk, I.A. (USSR). Study of the Factors Leading to the Degradation of Chain Structure During the Ionic Polymerization of Diene 346

Fersman, A.I., Vasil' Ro-ugan, and A.P. Karatchko (USSR). Study of the Interaction of Organometallic Compounds with Salts of Heavy Metals and the Use of Organometallic Compounds and Their Complexes to Stimulate Polymerization 345

Sancio, L., and E. Gal (Hungary). The Effect of Organic Linear Compounds on Some Details of Variable Valence on the Kinetics of the Polymerization of Vinyl Compounds 366

Bresler, B.M., M.I. Kosovskiy, L.Ya. Podolubny, and Shih Fung-i (USSR). Study of Some Details of the Kinetics of the Polymerization Under the Action of Complex Catalysts 372

Rastorguev, V.M., B.Ya. Matveev, M.M. Borisenko, and M.J. Ophir (USSR). Stereoselectivity and Optical Properties of Polymers 378

Birnberg, E.M., Yu. Ya. Gorlih, and O.S. Britzman (USSR). The Microactivity of Polymers and Methods of Study 388

Abram, A.D., A.P. Sheremet, M.K. Yakovlev, and I.P. Kostikova (USSR). On Carbocation and Carbination Polymerization Mechanisms Under the Effects of Gamma Radiation 394

Kazanskaya, V.A., and V.A. Kabanov (USSR). Polymerization Processes in Insoluble Molecular Dispersions 400

Machala, L., I. Mellich, and I. Peč (Czechoslovakia). Kinetics of the Polymerization of Formaldehyde 404

Vesely, K. (Czechoslovakia). On the Mechanism of Ionic Polymerization 409

Zifral, Z., and A. Farida (Czechoslovakia). On the Role of Nonpolar Compounds in the Cationic Polymerization of Isobutylene 272 445

L 29943-66 EWP(1)/T IJP(c) RM  
ACC NR: AP6006154 (A) SOURCE CODE: CZ/0078/65/000/010/0017/0017  
*40*

AUTHOR: Wichterle, Oto (academician) (Prague); Trekova, J. (Engineer) (prague) *B*

ORG: None

TITLE: (Method of producing high abrasion resistance organic glass) C2 Pat. no. PV  
5206-64 *16* *15*

SOURCE: Vynalezy, no. 10, 1965, 17

TOPIC TAGS: organic glass, polymer, oligomer, polymerization, catalysis

ABSTRACT: A method is proposed for producing high abrasion resistance organic glass by the two stage polymerization of allyl or methallyl esters<sup>α</sup>, of β-saturated carbonic acid esters. In the first stage anion polymerization catalysts are used, and in the second stage radical polymerization promoters are used. In the first stage liquid oligomers are prepared directly by using ternary alkaline alcoholates as catalysts.

SUB CODE: 11,07 SUBM DATE: 18Sep64

Card 1/1 CC

Distr: 4E2c(j)  
JLW  
1/1 Determination of the specific gravity of products of polymerization of «caprolactam»<sup>7</sup> Pavel Čeflein, J. H. Trešová, and Zdeněk Drbálek (Vysoká škola chem.-technol., Prague). Chem. listy 52, 1243-8 (1958). From dilatometric measurements an empirical equation was derived for the sp. gr.  $d$  of the polymer melt as a function of the temp.  $t$  and of the polymer content:  $d = 1.0917 - 8.66 \times 10^{-4} + (3.00 \times 10^{-4} + 3.21 \times 10^{-4})C$ , where  $C$  is the wt. fraction of the polymer; it is applicable above 210°. E. Erdős

5  
2 may  
1

JW

TREK cont'd, II

Determination of the carbonyl group by titration.

Journal A. Bakova, and K. V. Gaid, *Chem. Colloq.*, No. 1, 1953.

Anal. Chem. 15: 314-2 (1953) Pub. 1953.—The compound CO is made to react with an excess of the hydrochloride of a carbonyl reagent, and the HCl liberated is titrated to the pH value of the pure HCl soln. with standard alkali with a glass electrode. With water-insol. comds., titration is carried out in nonaq. solvents and water is added before titration. Investigated as reagents were the hydrochlorides of hydroxylamine (pH 3.65 in 0.5N soln.), of semicarbazide (pH 3.15 in 0.033N soln.), of thiosemicarbazide (pH 2.6), and of phenylhydrazine (pH 4.2). A soln. of NH<sub>2</sub>NH<sub>2</sub>HCl is too acid (pH 1.9) and the potential jump too small to give accurate results. Alternatively, an equimolar mixt. of NH<sub>2</sub>OH.HCl and NaOH for free phenylhydrazine can be used, and the excess reagent detd. by titration with alkali due to the above pH. G. Vard

CEFFELIN, P.; TREKOVAL, J.; DRBALEK, Z.

Determination of the specific gravity of products of polymerization  
of  $\epsilon$ -caprolactam. In German. Coll.Cz.Chem. 24 no.9:2898-2902 S '59.  
(EEAI 9:5)

Institut fur Plaste, Technische Hochschule fur Chemie, Prag.  
(Specific gravity) . (Polymers and polymerization)  
(Hexahydroazepinone)

43763

S/081/62/000/023/101/120  
B101/B186

AUTHORS: Marek, Miroslav, Trekoval, Jiri, Wichterle, Oto

TITLE: Method of polymerizing isobutylene

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1962, 708, abstract  
23P300 (Czechosl. pat. 100471, August 15, 1961)

TEXT: Isobutylene (I) is polymerized in the presence of insoluble catalysts obtained by reaction of  $\text{BF}_3$  and  $\text{TiCl}_4$  with hydroxy and alkoxy compounds of Mg and Al. This is done without using solvents. Polymers with a molecular weight of 20,000 - 150,000, usable as oil additives, are obtained. The rate of polymerization is controlled by the catalyst quantity. The molecular weight of the polymer rises rapidly when the reaction temperature is lowered. Example: A 10% suspension of  $\text{Al}(\text{OH})_3$  in hexane is saturated with  $\text{BF}_3$  at  $10^\circ\text{C}$ , and 0.5 mole  $\text{TiCl}_4$  per mole Al is added after distilling off 50% of the hexane. A conversion of 94% is reached with a 10% solution of I in hexane in the presence of 0.5% of the resulting catalyst after 2 hrs at  $0^\circ\text{C}$ , the molecular weight of the polymer being 120,000. At  $-30^\circ\text{C}$ ,  
Card 1/2

Method of polymerizing...

S/081/62/000/023/101/120  
B101/B186

the conversion is 90% after 3 hrs, the molecular weight being 600,000.  
Partially hydrolyzed aluminum sec-butylate,  $\text{Al}(\text{OH})_2\text{F}$ ,  $\text{Mg}(\text{OH})_2$ ,  $\text{Al}(\text{OC}_3\text{H}_7)_2\text{Cl}$   
and, instead of  $\text{TiCl}_4$ ,  $\text{SnCl}_4$  were also used for producing the catalyst.

[Abstracter's note: Complete translation.]

Card 2/2

CZECHOSLOVAKIA / Chemical Technology. High Molecular I  
Chemistry.

Abs Jour: Ref Zhur-Khimiya, No 14, 1959, 52209.

Author : Cafelin, P.; Trekovař, J.; Drbalek, Z.

Inst : Not given.

Title : Specific Gravity Determination of the  $\epsilon$ -Caprolactam Polymerization Products.

Orig Pub: Chem. listy, 1958, 52, No 7, 1243-1248.

Abstract: Dependency of the polymer melt's specific gravity and the degree of polymerization was established. The polymerization was conducted at different temperatures with the monomer content reaching up to 9.7% and the determinations of specific gravity of polymers were made for the temperatures ranging from 5° to 260°. Specific gravity (d) of a polymer depends on its weight fraction (c) and tem-

Card 1/2

H-209; I-1

CZECHOSLOVAKIA / Chemical Technology, High Molecular I  
Chemistry.

Abs Jour: Ref Zhur-Khimiya, No 14, 1959, 52209.

Abstract: perature (t):  $d = 1.0971 - 8.66 \cdot 10^{-4} + (3.00 \cdot 10^{-4}t + 3.31 \cdot 10^{-2})C$ .

At a constant monomer content, specific gravity is the linear function of temperature and does not depend on the degree of polymerization. At the crystallization point and near the melting point ( $135-220^\circ$ ), specific gravity depends on the rate of these processes. The experimentally determined values, for equally rapid changes in state conditions, indicate existence of hysteresis. The dilatometric method is described in detail, together with comments pertaining to possible determination errors.

Card 2/2

GAWRZEWSKI, Wieslaw; MAREK, Zdzislaw; SALWINSKA, Barbara; TREL, Franciszek

Fatal occupational accidents in the Lenin Foundry in Cracow and  
among construction crews building the foundry in 1953-1962. Pol.  
tyg. lek. 20 no.20:718-721 17 My '65.

1. Z Katedry Medycyny Pracy i Chorob Zawodowych AM w Krakowie  
(Kierownik: prof. dr. med. Leon Cholewa) i z Zakladu Medycyny  
Sadowej AM w Krakowie (Kierownik: doc. dr. med. Jan Kobiela).

TRNKA, Stanislaw, doc. dr

Amino acid composition of the protein in certain fodders.

Zeszyt probi post nauk roln. no. 41; 19-21. '60.

1. Kierownictwo Katedry Zywienia Zwierząt, Wyższa Szkoła Rolnicza,  
Kraków.

"APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001756520009-6

TRELA, Stanislaw, doc. dr

Effect of Stilbestrol implantation on the nitrogen, calcium and phosphorus balance and the energy metabolism in rats. Zeszyt probl post nauk roln no.54:7-21 '64.

1. Head, Department of Animal Feeding of the School of Agriculture,  
Krakow.

APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001756520009-6"

TRELIN, Yu. S.

"Investigation of Phenomena Accompanying the Propagation of Ultrasound and Methods  
to be used in Work in this Field: Interferometric Measurements at High Temperatures."

report presented at the 6th Sci. Conference on the Application of Ultrasound  
in the investigation of Matter, 3-7 Feb 1958, organized by Min. of Education  
RSFSR and Moscow Oblast Pedagogic Inst. im N. K. Krupskaya.

TRELIN, Yu.S.

<sup>24(1)</sup>

PHASE I BOOK EXPLOITATION 80V/3352

Vserossiyskaya konferentsiya professorov i prepodavateley pedagogicheskikh institutov.

Primeneniye ul'trakustiki k issledovaniyu veshchestva; trudy konferentsii, vyp. 8 (Application of Ultrasonics in the Study of Matter; Transactions of a Conference, Nr. 8) Moscow, Izd. MOPI, 1959. 170 p. 1,000 copies printed.

Tech. Ed.: S. P. Zhitov.

PURPOSE: The book is intended for physicists, particularly those specializing in the field of ultrasonics.

COVERAGE: This is a collection of 12 articles dealing with problems of acoustics, ultrasonics, and molecular physics. References are given at the end of each article.

Gredovitsev, A. S. Dispersion of Acoustic Waves in Rarefied Gases. Article I. 19

Zipir, A.-D., and V. F. Yakovlev. Pulse Method for Multiple Transformation of an Ultrasonic Signal in the Investigation of Liquid Media 63

Ilgunas, V., and E. Yaronis. On the Theory of Interferometers With Variable and Constant Length 67

Trelin, Yu. S. Some Results of Measurement of Ultrasonic Velocity in Gases by the Pulse Method 75

Volarovich, M. P., and D. B. Balashov. Investigation of Ultrasonic Velocity in Nitrogen Under Pressures up to 1050 kg/sq cm 83

Akhmetzyanov, K. G., and M. G. Shirkovich. Ultrasonic Velocity in Compressed Vapors of Ethyl Alcohol and Determination of Heat Capacities  $C_p$  and  $C_v$  93

Perepechko, I. I. Ultrasonic Propagation in Rarerfied Gases 103

Kuchera, E. On Some Conditions for Applicability of Result's Law for Solutions 115

Shil'yasyev, A. S., and B. B. Kudryavtsev. Ultrasonic Velocity and Surface Tension in Ternary Liquid Systems 121

Bessonov, M. B. Measuring Ultrasonic Velocity and Absorption in Solutions at High Temperatures 137 15

NOVIKOV, I.I. (Moskva); TRELIN, Yu.S. (Moskva)

Speed of sound along "vapor--liquid" phase equilibrium curve.  
Speed of sound propagation in saturated vapors of carbon dioxide.  
PMTF no.2:112-115 J1-Ag 60. (MIRA 14:6)  
(Sound--Speed) (Phase rule and equilibrium) (Carbon dioxide)

85567

S/089/60/009/005/011/020  
B006/B070

11.4100

AUTHORS:

Trelin, Yu. S., Vasil'yev, I. N., Roshchupkin, V. V.

TITLE:

Measurement of Ultrasonic Velocity in Molten Alkali Metals

PERIODICAL: Atomnaya energiya, 1960, Vol. 9, No. 5, pp. 410 - 411

TEXT: The ultrasonic velocity in, and the compressibility and sound absorption of, sodium and sodium-potassium eutectics (25% Na+75% K) were measured by an interference method described in the introduction. Square pulses of negative polarity from a 26-II (26-I) generator start a radio-pulse generator and excite a pulse oscilloscope of the type MO-3B (10-3V). Radio pulses of a duration of  $\tau = 10 \mu\text{sec}$  are transmitted at a carrier frequency of 2 Mc/sec to a quartz X-cut plate. The plate is placed in the upper acoustic delay line which can be moved in the vertical direction. The ultrasonic wave trains traverse the upper delay line, the molten metal, and the lower delay line where they are received by a quartz plate and transformed. The signals of the quartz plate go into the receiver which is connected to a superheterodyne circuit

Card 1/4

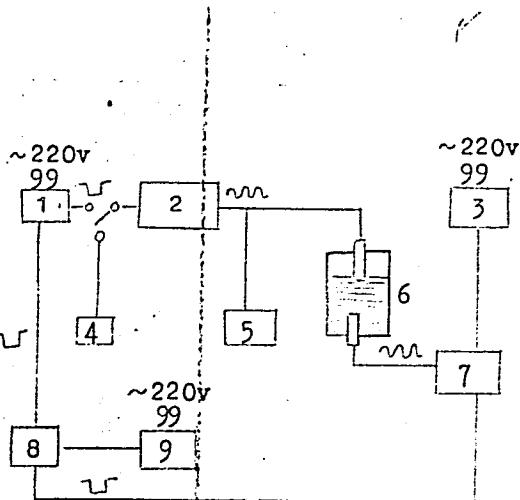
85567

Measurement of Ultrasonic Velocity in Molten Alkali Metals S/089/60/009/005/011/020  
B006/B070

(intermediate frequency, 16 Mc/sec). The pulses are detected in the channel going to the amplifier and the amplified video-pulses go on to the pulse oscilloscope. By displacing the movable acoustic delay line the wavelength can be varied, which enables a determination of the acoustic wavelength  $\lambda$ . The carrier frequency  $f$  of the radio pulses is measured with a heterodyne wavemeter of the type 526. The ultrasonic velocity is determined from the formula  $c = f\lambda$ . This method is free from systematic errors. The results of measurement are shown in diagrams. Fig.2 shows the sonic velocity and the compressibility  $\beta$  of Na and Na-K as functions of temperature. The curves obtained can be analytically represented by the following:  $c_{Na} = 2594 - 0.577 \cdot (t - 100)$ ;  $c_{Na-K} = 2070 - 0.543t$ . Fig.3 shows the ratio of specific heat and  $C_V$  as a function of temperature. Fig.4 shows the temperature dependence of the sound absorption coefficient. The individual curves are almost linear. Only the absorption coefficient in the eutectic shows a weak exponential increase with temperature. There are 4 figures and 3 references:  
1 Soviet and 2 US.

SUBMITTED: June 22, 1960

Card 2/4



35567

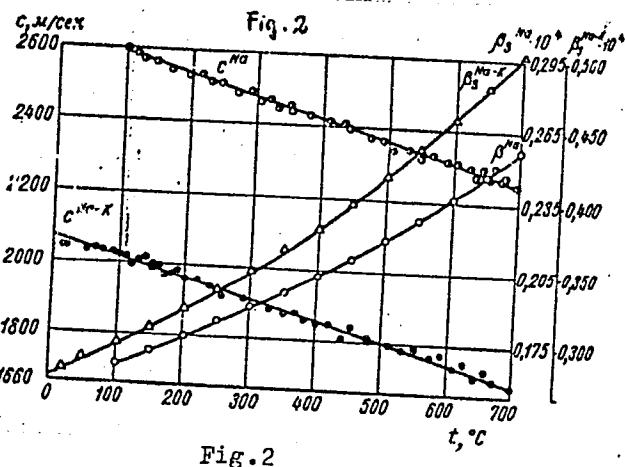
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B006/B070

Legend to Fig.1:

- 1) Generator (26-I)
- 2) Generator of sinusoidal oscillations
- 3) Feeding block
- 4) Feeding battery
- 5) Frequency meter
- 6) Measuring chamber
- 7) Receiver
- 8) Oscilloscope (10-3V)
- 9) Feeding block

Fig.1

Card 3/4



85567  
S/089/60/009/005/011/020  
B006/B070

Card 4/4

TRELIN, Yu. S.

Cand Tech Sci - (diss) "Thermodynamic studies of carbon dioxide using acoustic methods." Moscow, 1961. 11 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Order of Lenin Power Inst); 150 copies; free; (KL, 7-61 sup, 246)

TRELIN, Yu.S.; VASIL'YEV, I.N.

Measurements of ultrasonic speed in molten alkali metals at  
temperatures up to 700°C. Prim. ul'traakust. i issl. veshch.  
(MIRA 16:6)  
no.13:3-13 '61.

(Ultrasonic waves—Speed)  
(Alkali metals—Acoustic properties)

S/263/62/000/007/006/014

I007/I207

AUTHORS: Trelin, Yu. S. and Vasilyev, I. N.

TITLE: Measurement of ultrasound speed in molten alkaline metals heated to 700°C

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. Ismeritel'naya tekhnika, no. 7, 1962, 19, abstract  
32.7.133. Collection "Primeneniye ul'traakust. k. issled. veshchestva". M., no. 13, 1961,  
3-13

TEXT: Description is given of a method for measuring the speed of ultrasonic waves in molten metals at elevated temperatures. Two variants of the pulse method were tried: the method of fixed distances, and the pulse-interferometer method. Since the ultrasonic generator (X-cut quartz crystal) with a Curie point of 576°C does not operate when in contact with alkaline metals, use was made of stainless-steel delay lines permitting an almost distortion-free passage of radiosignals. Particular attention was paid to the problem of the wettability of stainless steel by molten metals, in view of the strong absorption of ultrasonic energy by the "surface barrier" formed between steel and the alkaline metal. Wetting could be improved by coating the sound-generating surface with a thin Sn-Pb alloy layer. The method of two fixed distances gives rise to systematic errors in the measurement of ultrasonic speed, which nevertheless do not exceed 1.5%. It was found that in terms of accuracy, the pulse-interferometer method comes close to that of the two fixed-distance method, and may be used for measuring the ultrasonic speed in fluids and molten metals at elevated temperatures. There are 9 figures and 6 references.

[Abstracter's note: Complete translation.]

Card 1/1

TRELIN, Yu. S.

Speed of ultrasonic waves in carbon dioxide in the liquid  
and gaseous states. Prim. ul'traakust. k issl. veshch.  
no.13:123-138 '61. (MIRA 16:6)

(Carbon dioxide)  
(Ultrasonic waves—Speed)

22881

S/089/61/010/005/009/015  
B102/B214

21.12.00

AUTHORS: Novikov, I. I., Trelin, Yu. S.

TITLE: The construction of entropy diagrams according to experimental data on the velocity of sound

PERIODICAL: Atomnaya energiya, v. 10, no. 5, 1961, 519-521

TEXT: The construction of thermodynamic diagrams required for the thermal calculation of reactors and the preparation of tables for coolants from the data, for example, on compressibility and specific heat are in many cases difficult and inaccurate, particularly in the neighborhood of the saturation curves and in the critical and transcritical region. The authors have now developed a new method which enables the thermodynamic diagram to be obtained rapidly and accurately from data on the velocity of sound in the coolant. This method is described in the present "Letter to the Editor". It is based on the following: On account of the isentropic change of state of the matter on the propagation of sound the velocity of sound is given by  $c = \sqrt{-gv^2(\partial p/\partial v)_s}$ . If c and the compressibility are measured one obtains X

Card 1/3

22881

The construction of entropy diagrams...

S/089/61/010/005/009/015  
B102/B214

easily  $(\partial p / \partial v)_s = -c^2 / gv^2$ . From it the relationship between the volume change, pressure, and enthalpy at constant s is determined from measurements:  $\Delta v = (\partial v / \partial p)_s \Delta p$ ;  $\Delta i = v \Delta p$ . As  $(\partial v / \partial p)_s$  is determined by the measurement, v, i, and p can be found for any point of the isentropic curves. An additional advantage is that at present the velocity of sound and the temperature can be easily and accurately (0.1-0.3 % error) measured, more simply than, say, the specific heat. The same holds for compressibility. Naturally, the velocity of sound is measured at frequencies where no dispersion occurs. The entropy and enthalpy of the liquid and the gaseous phases must be known on the saturation curve in order to be able to construct the T(s) and i(s) diagrams. These quantities are, however, known with high accuracy for most substances. To verify the method the authors have taken the T(s) and i(s) diagrams of CO<sub>2</sub> in the region of 1-100 atm, and 5-100°C with ultrasonic frequencies of 500 and 1500 kc/sec. Fig. 3 shows the i(s) diagram. D. D. Kalafati and L. Z. Rumynskiy are mentioned. There are 3 figures and 7 references: 3 Soviet-bloc and 4 non-soviet-bloc.

SUBMITTED: February 6, 1961

Card 2/3

NOVIKOV, I.I., doktor tekhn.nauk; TRELIN, Yu.S., inzh.

New method of plotting thermodynamic diagrams of working matter.  
Teploenergetika 9 no.2:79-85 F '62. (MIRA 15:2)

1. Moskovskiy inzhenerno-fizicheskiy institut.  
(Thermodynamics--Tables, calculations, etc.)

TELEIN, YU. S. (Moscow)

"data on the velocity of sound in molten alkali metals."

Report presented at the Seminar on the Problems of research on thermophysical properties of substances at high temperatures, Novosibirsk, 9-10 April 1963.

L 4501-00 EAT(i)/EMI(m)/EMI(w)/i/EMI(t)/EMI  
ACC NR: AP6021214 SOURCE CODE: UR/0294/66/004/003/0364/0368

AUTHOR: Trelin, Yu. S. (Moscow); Vasil'yev, I. N. (Moscow); Proskurin, V. B. (Moscow);  
Tsyganova, T. A. (Moscow)

ORG: none

TITLE: Experimental data on the speed of sound in alkaline metals at temperatures up  
to 800°C

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 3, 1966, 364-368

TOPIC TAGS: acoustic waveguide, sound transmission, alkali metal, sodium, potassium

ABSTRACT: The present work discusses the method and results of measuring the speed of sound in sodium and potassium and three mixtures of these metals (69.4%, 53.1%, 28.5% of sodium in each mixture) at temperatures up to 800°C. The speed of sound was determined by an acoustic interferometer adapted to high temperature work and in chemically active substances by using steel acoustic waveguides. In all cases under investigation, the speed of sound was found to be a linear function of the temperature. The greatest speed was observed in pure sodium. The authors also computed the following quantities on the basis of the acoustic data and density: adiabatic and isothermal compressibilities, ratio of heat capacities at constant pressure to that at constant volume. These quantities were derived from the thermodynamic relations given in a seri

Card 1/2

UDC: 534.2.22:532.12

64  
61  
B  
27

B-12112-50

ACC NR: AP6021214

es of equations. For the three alloys of Na and K, density relationship in terms of relative concentrations was derived from the empirical data. The measurement errors of these quantities are also given. This work was stimulated by the need of thermodynamic data for liquid metals needed in the design of the atomic energy power generators. Orig. art. has: 3 figures, 1 table, 5 formulas.

SUB CODE: 20/ SUBM DATE: 25Apr65/ ORIG REF: 005/ OTH REF: 003

Card 2/2 fv

ACC NR: AF7003569

SOURCE CODE: UR/0000/66/000/000/0271/0274

AUTHORS: Baranov, V. M.; Trolin, Yu. S.

ORG: Institute of Physics and Engineering, Moscow (Inzhenerno-fizicheskiy institut)

TITLE: Measurement of pressure in gaseous media at elevated temperatures using ultrasound

SOURCE: AN BSSR. Institut teplo- i massoobmena. Issledovaniye teplo- i massoobmena v tekhnologicheskikh protsessakh i apparatakh (Study of heat and mass transfer in technological processes and apparatus). Minsk, Izd-vo Nauka i tekhnika, 1966, 271-274

TOPIC TAGS: pressure measuring instrument, high temperature instrument, ultrasonic equipment, gas pressure

ABSTRACT: An ultrasonic device capable of measuring the pressure of corrosive gases at elevated temperatures is described. The pressure is determined by measuring the attenuated amplitude of pulsed ultrasound propagated through the gas (contained in a stainless steel cylinder). To insure natural cooling of the ceramic piezoelectric converters (radiator and receiver), they are mounted at the ends of cylindrical steel sound guides which are welded to the ends of the gas cylinder. A block diagram of the device is presented, and the function of its components is discussed. Testing and calibration of the device was carried out with nitrogen and argon in the pressure range  $0-10 \times 10^5 \text{ n/m}^2$  at temperatures from 290 to 1180K. Orig. art. has: 2 diagrams.

SUR CODE: 20/ SUBM DATE: 23Jul66/ ORIG REF: 003/ OTH REF: 003

Card 1/1

ACC NR: AP7007684

SOURCE CODE: UR/0386/66/003/002/0101/0103

AUTHOR: Trelin, Yu. S.; Sheludyakov, Ye. P.

ORG: Institute of Thermophysics, Siberian Branch AN SSSR (Institut teplofiziki  
Sibirskogo otdeleniya AN SSSR)TITLE: Experimental determination of the speed of sound in the critical region of  
carbon dioxideSOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu,  
v. 3, no. 2, 1966, 101-103

TOPIC TAGS: carbon dioxide, acoustic speed, critical point

ABSTRACT: The authors carried out systematic measurements of the speed of sound in the critical region of CO<sub>2</sub>. The measurements were made at 500 cps. The results of measurements along four isotherms, including the critical one, are shown in Fig. 1. The isotherms of the speed of sound have a sharp minimum near the critical point. The lowest error in the speed of sound, equal to 0.25%, is observed at the ends of the isotherms. On approaching the minima of the speed of sound, the error rises and reaches 1%. Values obtained by other authors for CO<sub>2</sub> were 140 m/sec, 150 m/sec, and 141.6 m/sec. The smallest value of the speed of sound recorded in this work is 132 m/sec. In processing the measurement results it was found that the points of the sound-speed minima on the isotherms plotted in temperature/pressure coordinates

Card 1/2

UDC: none

ACC NR: AP7007684

lie on a line which is the continuation of the liquid-vapor phase-equilibrium curve.  
Orig. art. has: 2 figures.

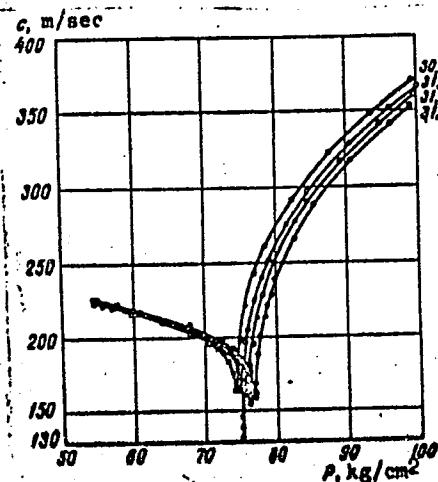


Fig. 1

SUB CODE: 20, 07 / SUBM DATE: 13Dec65 / ORIG REF: 002 /  
OTH REF: 003

Card 2/2

ACCESSION NR: AT4013176

S/3059/63/000/000/0263/0269

AUTHOR: Trelin, Yu. S.; Vasil'yev, I. N.

TITLE: Investigation of thermal contact resistance at the "stainless steel - melted alkali metal" boundary by the ultrasonic method

SOURCE: Zhidkiye metally\*. Sbornik statey. Moscow, Gosatomizdat, 1963, 263-269

TOPIC TAGS: thermal contact resistance, alkali metal, stainless steel, ultrasonic wave test, contact resistance, steel alkali metal boundary

ABSTRACT: It has been found that thermal emission from melted alkali metals during the initial period of operation has a much lower heat-transfer coefficient than the calculated theoretical value. This is explained by the lack of reliable thermal contact between the wall of the working part and the heat transfer medium. The authors propose an ultrasonic method for investigating this complex phenomenon. It involves sounding of the melted metal and adjoining acoustic lines made of EYa1T stainless steel by low-power ultrasonic impulses. This method allows visual observation of the changes in thermal contact on a cathode ray tube, so that the melted metal can be studied under both static and dynamic conditions, depending on the purity of the melted metal, surface roughness of the acoustic

Card 1/3

ACCESSION NR: AT4013176

lines, temperature, method of filling the unit, etc. Fig. 1 in the Enclosure shows the design of the section used for measurements under dynamic conditions. Wiring diagrams of the generator and receiver are also presented. The acoustic resistance is determined by the degree of interaction of the molecules of the melted metal with the molecules of the wall; this also determines the degree of thermal contact. Analysis of the first test series shows that in order to obtain consistent results it is very important to ensure a uniform initial degree of surface roughness at the faces of the acoustic lines and a similar chemical composition of the alkali metal used for each cycle. Orig. art. has: 5 figures.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 20Feb64

ENCL: 01

SUB CODE: ML

NO REF SOV: 004

OTHER: 000

Card

2/3

TRELINA, Valentina Nikolayevna; KOSITSYNA, Anna Illarionovna;  
BISEROV, M.P., red.; ZAKHARCHUK, V.K., tekhn. red.

[Mechanization of the production of canned hors d'oeuvres;  
organization of the production of canned hors d'oeuvres in  
the canning shops of the Petropavlovsk Tin Can Factory] Me-  
khanizatsiya proizvodstva zakusochnykh konservov; organiza-  
tsiya vyrabotki zakusochnykh konservov v konservnom tsekle  
Petropavlovskoi zhestiano-banochnoi fabriki. Petropavlovsk-  
Kamchatskii, Knizhnaiia red. "Kamchatskoi pravdy," 1963. 12 p.  
(MIRA 17:1)

(Petropavlovsk-Kamchatskiy--Canning industry)

TRELINSKI, Jerzy, inz.

The echoless chamber in the Telecommunication and Radio Institute  
in Warsaw. Prace Inst teletechn 3 no.3:117-121 '59.

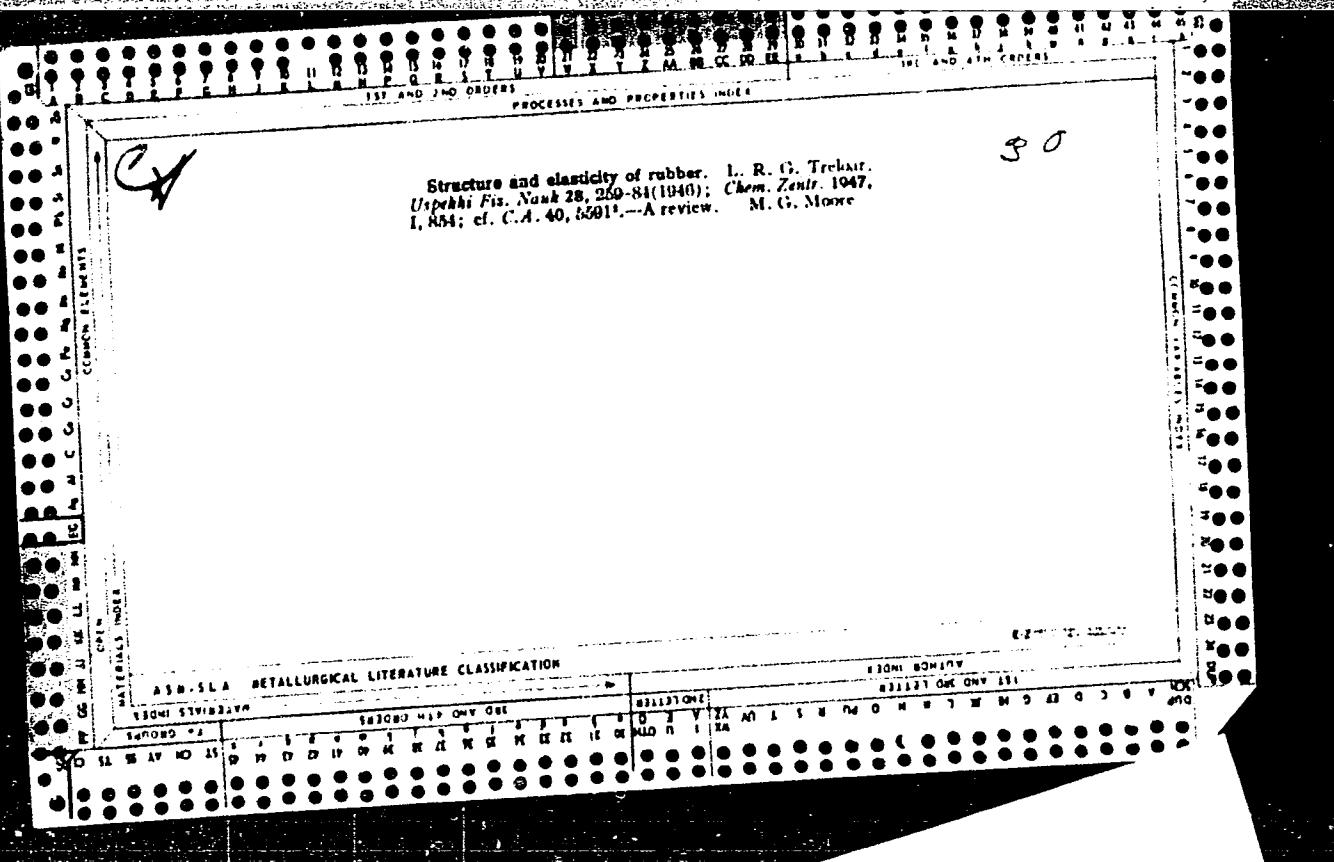
Treloar, L.

N/5  
614.31  
.T78

Fizika uprugosti kauchuka (The physics of rubber elasticity) Moskva, Izd-vo  
ino. lit., 1953.  
240 p. illus., diagrs.,

TRELOAR, L.; KUVSHINSKIY, Ye.V. [translator]; GUROV, K.P., redaktor;  
GERASIMOVA, Ye.S., tekhnicheskiy redaktor

[The physics of rubber elasticity] Fizika uprugosti kauchuka.  
Perevod s angliiskogo pod red. E.V.Kuvshinskogo. Moskva, Izd-vo  
inostrannoi lit-ry, 1953. 240 p. [Microfilm] (MLRA 7:10)  
(Rubber) (Elasticity)



"APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R001756520009-6"

COUNTRY : USSR  
 CATEGORY : Soil Science. Fertilizers. 1-6-5  
 ABS. JOUR. : Zemel'stvo, No. 4, 1959.  
 JOURNAL  
NAME:  
 TITLE : Investigation of Peatening and Cultivation of  
 tillable layer of Turf - peatolic soils.  
 PERIOD. : Dokl. Akad. Nauk SSSR, No. 117, 1957, vyp. 28, 90-95  
 PUBLISHER : Institute of Agricultural Sciences, Moscow Agric. Acad. im. K.A. Timiryazev  
 DATE : 1957, vyp. 28, 90-95  
 ABSTRACT : Experiments were conducted at the field expe-  
 rimental station of the Institute of Agricultural Sciences, Moscow Agric. Acad. im. K.A. Timiryazev, in  
 1957. A simultaneous introduction of fertilizers and  
 tillage on the peat soil was conducted. The results  
 show that the formation of peat soil is greatly in-  
 fluenced by the formation of peat in the surface  
 layer. Formation of the peat soil on the sur-  
 face influenced granulation, which had neg-

THELYA, V., aspirant.

Investigating the deepening and improvement of the plow layer in  
turf-Podsolic soils. Dokl. TSKhA no. 28:90-95 '57. (MIRA 11:4)  
(Podzol) (Tillage)

TRELYA, V., aspirant.

Studies on photonitrification. Izv.TSKhA no.3:233-235 '56.  
(Nitrification) (Photochemistry)  
(MIR 10:3)

GOROKHOVSKIY, V.M.; SAMITOV, Yu.Yu.; TREMASOV, N.V.

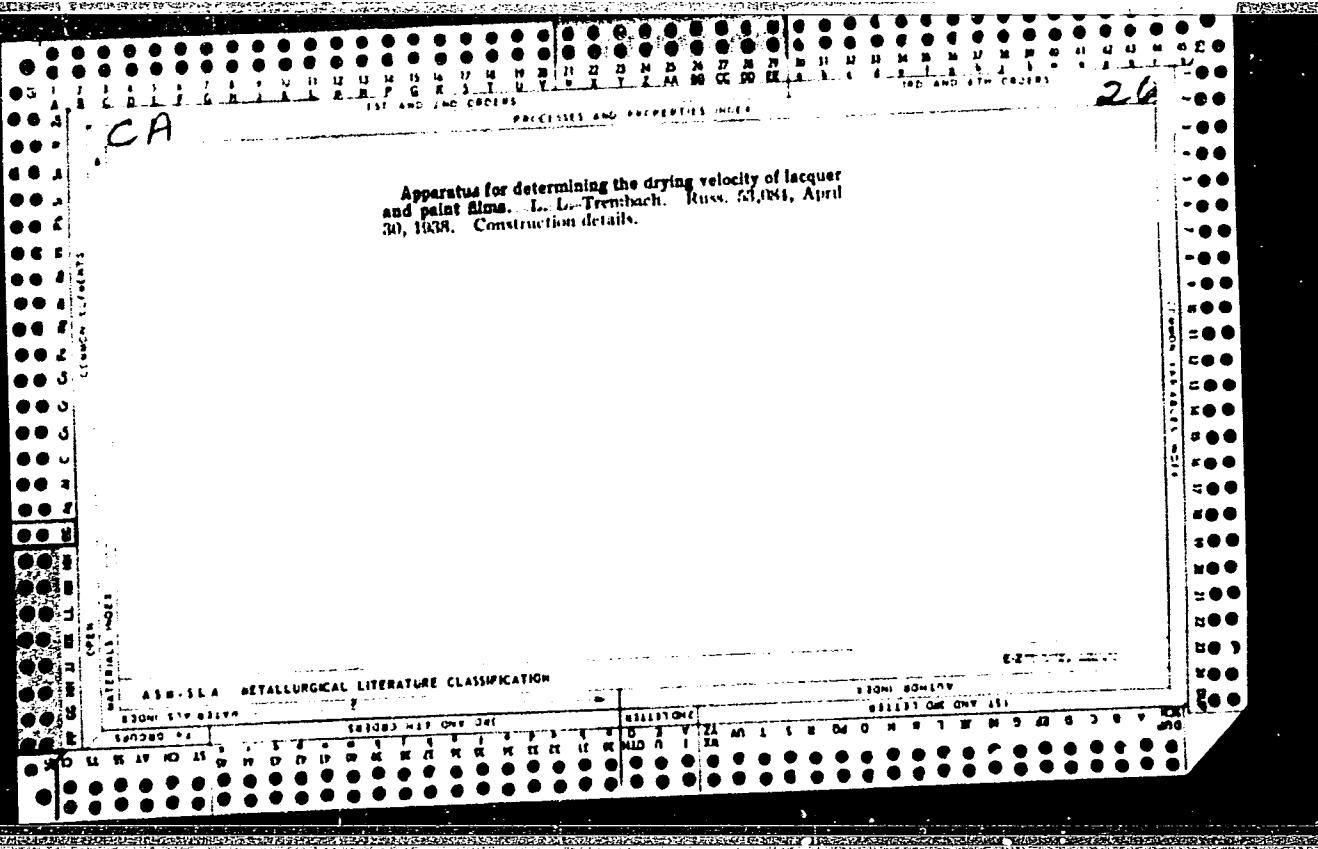
High-frequency titration by the method of heterodyne pulsations.  
Izv. vys. ucheb. zav; khim. i khim. tekhn. 3 no. 5:805-809 '60.  
(MIRA 13:12)

1. Kazanskiy gosudarstvennyy universitet imeni V.I. Ul'yanova-Lenina. Kafedra analiticheskoy i organiceskoy khimii.  
(Conductometric analysis)

TREMBA, O.I.

New structure of the rural public health service. Sov.zdrav. 15  
no.6:14-17 K-D '56. (MLRA 10:1)

1. Glavnnyy vrach lechebno-profilakticheskogo ob'yedineniya  
Smolenskogo rayona Altayskogo kraya.  
(PUBLIC HEALTH,  
in Russia, new structure in rural areas)



TOTROV, A.G., red.; TREMBACH, K.V., red.; DZATTSEYVA, T.A., red.;  
DZUGAYEVA, L.V., red.; DATRIYEVA, Ye.U., tekhn.red.

[Here is the joy of our work; about the students' brigade  
of the Kadgaron Secondary School] Vot ona - radosh' truda;  
ob uchenicheskoi brigade Kadgeronskoi srednei shkoly.  
Ordzhonikidze, Severo-Osetinskoe knizhnoe izd-vo, 1960. 42 p.  
(MIRA 14:2)

(Kadgaron--Agriculture--Study and teaching)

"APPROVED FOR RELEASE: 03/20/2001

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APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001756520009-6"

Dissertation: "Calculation of Mirror Illumination by Means of Elementary Reflections." Cand Tech Sci, Moscow Power Engineering Inst, Moscow, 1953. (Referativnyy Zhurnal-Fizika, Moscow, Jun 54)

SO: SUM 318, 23 Dec 1954

TREMBACH,V.V., kandidat tekhnicheskikh nauk

Calculating rippled mirror lamp reflectors. Svetotekhnika 1  
no.2:17-22 Ap '55.  
(MIRA 8:9)

1. Moskovskiy energeticheskiy institut  
(Reflection (Optics))

TREMBACH, V.V., kandidat tekhnicheskikh nauk.

Calculation of assymmetrical mirror illuminants. Svetotekhnika 1  
no.6:12-16 D '55. (MLRA 9:4)

1. Moskovskiy energeticheskiy institut.  
(Reflection (Optics)) (Mirrors)

YEPANESENKO, M.M., dotsent; TREMBACH, V.V., dotsent.

Electric illumination of the architectural ensembles of the  
All-Union Agricultural Exhibition. Gor. khoz. Mosk. 29 no.5;  
30-32 My '55. (MLRA 8:6)  
(Moscow--Agricultural exhibitions) (Lighting, Architectural  
and decorative)

TREMBACH, V.V., kandidat tekhnicheskikh nauk.

Answer to I.I. Spivak's letter. Svetotekhnika 2 no.3:28 My '56.  
(MLRA 9:8)

(Optics)

TREMBACH, V.V., kandidat tekhnicheskikh nauk, dotsent.

Investigation of operational aberrations of lamp reflectors. Trudy  
MEI no.18:428-440 '56. (MIRA 10:1)

1. Kafedra svetotekhniki.  
(Electric lamps)

~~TRIMBACH, V.V.~~, kandidat tekhnicheskikh nauk.

Calculating reflecting luminaires having RVDL lamps. Svetotekhnika  
3 no.7:5-9 J1 '57. (MLPA 10:8)

1. Moskovskiy energeticheskiy institut.  
(Electric lighting, Mercury-vapor)

SOURCE: Svetotekhnika, no. 5, 1965, 22-24

TOPIC TAGS: simulator, electronic simulator, light reflector / MN-7 electronic  
simulator

L 63313-65

ACCESSION NR. AP5012898

block diagram of the solution on the MN-7 is shown. The simulation was performed "by the author jointly with Engineer V. K. Pakhomov." Orig. art. has 6 figures and 5 formulas.

2

PERIODICALS LIBRARY AND INFORMATION CENTER (Moscow Power-Engineering Institute)

SUB CODE: 80

ALEKSEYEVA, G.Ye., kand. tekhn. nauk, dots.; MELESHKINA, L.P., dots., kand. tekhn. nauk; BALUYEV, V.K., inzh.; BANDAS, A.M., prof., doktor tekhn. nauk; VENIKOV, V.A., prof., doktor tekhn. nauk; YEZHKOV, V.V., kand. tekhn. nauk; ANISIMOVA, N.D., dots., kand. tekhn. nauk; GANTMAN, S.A., kand. khim. nauk; GLAZUNOV, A.A., dots., kand. tekhn. nauk; GOGLA, L.K., inzh.; GREBENNICHENKO, V.T., inzh.; GRUDINSKIY, P.G., prof.; GORFINKEL', Ya.M., inzh.; ZVEZDIN, A.L., inzh.; KAZANOVICH, G.Ya., inzh.; KNYAZEVSKIY, B.A., dots., kand. tekhn. nauk; KOSAREV, G.V., dots., kand. tekhn. nauk; MESSELMAN, S.M., kand. tekhn. nauk, dots.; KOKHAN, N.D., inzh.; KUVAYEVA, A.P., dots., kand. tekhn. nauk; SOKOLOV, M.M., dots., kand. tekhn. nauk; LASHKOV, F.P., dots., kand. tekhn. nauk; LAZIN, A.I., inzh.; YUDIN, F.I., inzh.; LIVSHITS, A.L., kand. tekhn. nauk; METEL'TSIN, P.G., inzh.; NEKRASOVA, N.M., dots., kand. tekhn. nauk; OL'SHANSKIY, N.A., dots., kand. tekhn. nauk; POLEVAYA, I.V., dots., kand. tekhn. nauk; POLEVOY, V.A., dots., kand. tekhn. nauk [deceased]; RAZEVIG, D.V., prof., doktor tekhn. nauk; RAKOVICH, I.I., inzh.; SOLDATKINA, L.A., dots., kand. tekhn. nauk; TREMBACH, V.V., dots., kand. tekhn. nauk; FEDOROV, A.A., prof., kand. tekhn. nauk; FINGER, L.M., inzh.; CHILIKIN, M.G., prof., doktor tekhn. nauk, glav. red.; ANTIK, I.V., inzh., red. GOLOVAN, A.T., prof., red.; PETROV, G.N., prof., red.; FEDOSEYEV, A.M., prof., red.

(Continued on next card)

ALEKSEYEVA, G.Ye.---- (continued). Card 2.

[Electrical engineering manual] Elektrotekhnicheskii  
spravochnik. Pod obshchei red. A.T. Golovana i dr. Moskva,  
Energiia. Vol.2. 1964. 758 p. (MIKA 17:12)

1. Moscow. Energeticheskiy institut. 2. Moskovskiy energeticheskiy institut (for Golovan, Grudinskiy, Petrov, Fedoseyev, Chilikin, Venikov). 3. Chlen-korrespondent AN SSR (for Petrov).

BREDNYAKOV, A.V., kand. tekhn. nauk; TREMBACH, V.V., kand. tekhn. nauk; EL'MAN, R.I., kand. tekhn. nauk

Use of electronic analog computers in designing mirror-type light fixtures. Svetotekhnika 9 no.6:13-18 Je '63.

(MIRA 16:6)

(Electric light fixtures)  
(Electronic analog computers)

TREMBACH, V.V., kand.tekhn.nauk

Model of a mirror-prismatic fluorescent light fixture.  
Svetotekhnika 8 no.5:1-6 My '62. (MIRA 15:6)

1. Moskovskiy energeticheskiy institut.  
(Fluorescent lighting)

S/196/62/000/002/011/023  
E194/E155

AUTHOR: Trembach, V.V.

TITLE: Lighting fittings with powerful xenon lamps

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika  
no.2, 1962, 10, abstract 2V 68. (Svetotekhnika,  
no.8, 1961, 1-7).

TEXT: The article describes lighting fittings with 20-kW  
xenon lamps developed in the Kafedra svetotekhniki i istochnikov  
sveta (Department of Lighting Engineering and Light Sources) of  
the Moskovskiy energeticheskiy institut (Moscow Power Engineering  
Institute). When using these lamps in lighting installations  
their light flux must be redistributed, which is difficult to do.  
Diffusion reflectors are not satisfactory for this purpose because  
they do not give the necessary amplification at small angles to  
the horizontal. Neither is the use of refracting and protective  
glasses recommended because of the high surface temperature, up  
to 300 °C. A fitting has been developed for city lighting using  
a cylindrical mirror reflector and two flat mirrors of stainless

Card 1/2

Lighting fittings with powerful .... S/196/62/000/002/011/023  
E194/E155

steel. The greatest light output from the fitting (at an angle of  $70^\circ$ ) is 460 kilocandles with a light flux of 380 kilolumens; the efficiency is 0.65 and the amplification factor 10. The dimensions of the reflector with stainless steel mirror inserts are: height 627 mm, depth 441 mm, length 1700 mm. Curves are given for light strength in crosswise and lengthwise planes, also curves of equal values of relative illumination and isoluxes for an installation height of 23 m and maximum angle of slope of light source to horizontal of  $20^\circ$ . The fitting was made and used to illuminate the British Exhibition in Moscow. A mirror fitting has been developed for street lighting; the lower part consists of two parabolic-cylindrical reflectors and the upper of two flat mirror inserts sloping at an angle of  $8^\circ$  to the horizontal. The maximum light output of the fittings (at an angle of  $70^\circ$ ) is 232 kilocandles, the efficiency 0.68, and the amplification factor 5. The requirements of fittings with xenon lamps and their manufacture are stated.

8 figures, 8 literature references.

Card 2/2 [Abstractor's note: Complete translation.]

TREMBACH, V.V., kand.tekhn.nauk

Calculation of mirror-prismatic light fixtures for high-pressure  
mercury lamps. Svetotekhnika 6 no.9:1-7 S '60. (MIRA 13:9)

1. Moskovskiy energeticheskiy institut.  
(Electric light fixtures) (Electric light, Mercury vapor)

GUSEV, S.A., inzh.; ZHUKHOVITSKIY, B.Ya., kand.tekhn.nauk; ZARIN, D.D.,  
kand.tekhn.nauk; IVANOV-SMOLENSKIY, A.V., kand.tekhn.nauk;  
KNIAZEVSKIY, B.A., kand.tekhn.nauk; KUZNETSOV, A.I., inzh.;  
KOZIS, V.L., kand.tekhn.nauk; KORYTIN, A.A., inzh.; LASHKOV,  
F.P., inzh.; L'VOV, Ye.L., kand.tekhn.nauk; MELESHKINA, L.P.,  
kand.tekhn.nauk; NEKRASOVA, N.M., kand.tekhn.nauk; NIKULIN,  
N.V., kand.tekhn.nauk; POLEVOY, V.A., kand.tekhnicheskikh  
nauk; RAZEVIG, D.V., kand.tekhn.nauk; ROZANOV, G.M., kand.tekhn.  
nauk; RUMSHISKIY, L.Z., kand.fiz.-matem.nauk; SVISTOV, N.K.,  
kand.tekhn.nauk; SIROTINSKIY, Ye.L., kand.tekhn.nauk; SOKOLOV,  
M.M., kand.tekhn.nauk; TALITSKIY, A.V., prof.; TREMBACH, V.V.,  
inzh.; FEDOROV, A.A., kand.tekhn.nauk; GRUDINSKIY, P.G., prof.;  
PRYTKOV, V.T., kand.tekhn.nauk; CHILIKIN, M.G., prof., glavnnyy  
red.; GOLOVAN, A.T., prof., red.; PETROV, G.N., prof., red.;  
FEDOSEYEV, A.M., prof., red.; ANTIK, I.V., red.; SKVORTSOV, I.M.,  
tekhn.red.

[Handbook for electric engineering] Elektrotekhnicheskii spravochnik.  
Moskva, Gos.energ.izd-vo, 1952. 640 p. (MIRA 13:2)

1. Prepodavateli Moskovskogo energeticheskogo instituta imeni V.M.  
Molotova (for all except Antik, Skvortsov).  
(Electric engineering)

TREMBACH, V.V., kand.tekhn.nauk; LITVINOV, V.S., inzh.

Broad-radiation reflector fixture for high-pressure mercury lamps. Svetotekhnika 5 no.9:17-22 S '59. (MIRA 13:2)

1. Moskovskiy energeticheskiy institut.  
(Electric lighting, Mercury vapor)

TREMBACH, V.V., kand.tekhn.nauk; LITVINOV-LUNTS,V.S., inzh.

Design of a deep-bowl lighting fixture equipped with a wave-shaped  
mirror-reflector surface. Svetotekhnika 5 no.5:15-19 My '59.  
(MIRA 12:7)

1. Moskovskiy energeticheskiy institut.  
(Electric lighting--Equipment and supplies)

PHASE I BOOK EXPLOITATION

925

Trembach, Vladimir Viktorovich

Svetil'niki; teoriya i raschet (Luminaires; Theory and Design)  
Moscow, Gosenergoizdat, 1958. 383 p. 7,000 copies printed.

Ed.: Litvinov-Lunts, V.S.; Tech. Ed.: Fridkin, A.M.

PURPOSE: This monograph has been approved by the Ministerstvo  
vysshevogo obrazovaniya (Ministry of Higher Education) as a  
textbook for students of power engineering vuzes specializing  
in illumination engineering. It may also be used by engineering  
and technical workers engaged in the design, construction and  
production of luminaires.

COVERAGE: The monograph discusses the theory and design of the op-  
tical part of luminaires. It explains the engineering methods  
of calculating efficiency, plotting the curve of light distribu-  
tion, and the optical design of luminaires. Lectures given by the

Card 1/6

Luminaires; Theory and Design      925

author in 1948 to students of illumination engineering at the facul'tet Elektrovakuumnoy tekhniki i spetsial'nogo Proborostroyeniya Moskovskogo ordena Lenina energeticheskogo instituta (Department of Electric vacuum Devices and Special Instrument Design of the Moscow Order of Lenin Power Engineering Institute) constitute the basis of the present work. These lectures summarize the author's own works and the studies and research which have appeared in the Soviet and foreign literature on the development of methods for the design of the optical part of luminaires. According to the author, the outstanding feature of his preparation of this material is the adoption of a single principle for designing the optical part of luminaires from the point of view of their brightness and the area of their luminous parts. This textbook has been composed to correspond to the second part of the course in lighting equipment, called "Luminaires." It is pointed out that the present work is the first attempt to offer a systematic presentation of engineering design methods for various types of luminaires. The author thanks the illumination engineering staff of MEI (Moscow Institute of

Card 2/6

Luminaires; Theory and Design 925

Power Engineering) for their help and advice. He also thanks Docent M.A. Ostrovskiy, Candidate of Technical Sciences, Engineer V.S. Litvinov-Lunts, Professor V.V. Meshkov and Professor N.A. Karyakin. There are 48 references, of which 45 are Soviet, and 3 English.

TABLE OF CONTENTS:

Preface	3
Ch. 1. Characteristics of Luminaires	7
1. General aspects	7
2. Light distribution characteristics of luminaires	18
3. Classification of luminaires	32
4. Engineering tests of luminaires	43
Ch. 2. General Information and Basic Concepts in the Theory of Designing the Optical Part of Luminaires	49

Card 3/6

Luminaires; Theory and Design	925
1. Lighting materials	49
2. Basic concepts, terms and symbols	59
3. Operating principles of the optical parts of luminaires	64
Ch. 3. Design of Luminaires With Mirror Reflectors	72
1. General information on mirror luminaires	72
2. Calculating the efficiency of mirror luminaires	79
3. Equations of mirror surface	81
4. Zonal curves of light intensity of mirror surfaces	107
5. Designing a symmetrical mirror luminaire for a given light distribution	152
6. Designing a nonsymmetrical mirror luminaire for a given light distribution	171
7. Production errors of luminaire mirror reflectors	188
Ch. 4. Design of Luminaires With Reflectors Made of Light- diffusing Materials	195

Card 4/6

## Luminaires; Theory and Design 925

1.	General information on luminaires with light-diffusing and frosted materials	195	
2.	Calculating efficiency of luminaires with reflectors of light-diffusing materials	202	
3.	Calculating light intensity curves of luminaires with light-diffusing reflectors	217	
4.	Design of luminaires with frosted reflectors	234	
Ch.	5.	Design of Luminaires With Diffusers	255
1.	General information on luminaires with diffusing and frosted diffusers	255	
2.	Calculating efficiency of luminaires with diffusers	263	
3.	Calculating light intensity curve of luminaire with diffusing diffuser	271	
4.	Calculating light intensity curve of luminaire with frosted diffuser	279	
5.	Design of mirror lamp with frosted bowl	289	

Card 5/6

'Luminaires; Theory and Design	925
Ch. 6. Design of Luminaires With Prismatic Refractors	299
1. General information on luminaires with prismatic refractors	299
2. Optical design of prismatic elements of refractors	299
3. Calculating zonal curves of light intensity of a symmetrical prismatic refractor	311
4. Design of prismatic refractor having symmetrical light distribution	330
	347
Appendixes	358
Bibliography	383

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Card 6/6

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TREMBACH, Vladimir Viktorovich; LITVINOV-LUNTS, V.S., red.; FRIDKIN, A.M.,  
tekhn. red.

[Iuminaires] Svetil'niki; teoriia i raschet. Moskva, Gos. energ.  
izd-vo, 1953. 383 p. (MIRA 11:8)  
(Electric lamps)

TREMBACH, V.V., assist.

Designing mirror illuminants by the method of elementary reflections.  
Trudy MGI no.13:53-65 '53. (MIRA 11:4)

1. Moskovskiy energeticheskiy institut im. V.M. Molotova, Kafedra  
svetotekhniki.  
(Lighting)

TREMBACH, V.V., assist.; LITVINOV, V.S., student.

Designing mirror lamps. Trudy MMF no.13:66-75 '53. (MIRA 11:4)

1. Moskovskiy energeticheskiy institut im. V.M. Molotova, Kafedra  
svetotekhniki.  
(Electric lighting)

TREMBACH, V. V.

TREMBACH, V.V., kand. tekhn. nauk.

Development of methods of calculating and designing luminaires.  
Svetotekhnika 3 no.11:14-18 N '57. (MIRA 10:12)

1. Moskovskiy energeticheskiy institut.  
(Electric lighting)

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BORON, Piotr; BORUCKI, Zdzislaw; BULHAK, Maciej; TREMBACZOWSKI, Emanuel

Use of vitamin B 12 labeled with Co 58 in the diagnosis of  
parenchymal liver diseases. Pol. arch. med. wewn. 34 no.4:  
405-412 '64

1. Z Kliniki Chorob Zakaznych Akademii Medycznej w Białymostku  
(Kierownik: doc. dr. med. P.Boron) czł z Zakładu Fizyki  
Lekarskiej Akademii Medycznej w Białymostku (Kierownik: dr.  
nauk mat.-fiz. E.Trembaczowski).